

We claim:

1. An acoustic drive array comprising mounting means for supporting a midrange acoustic drive unit and at least one high frequency acoustic drive unit and means defining an acoustically reflective surface, said mounting means being arranged in a fixed, predetermined spatial relationship with said reflective surface such that said at least one high frequency drive unit is disposed in front of said reflective surface, the configuration of the reflective surface and the disposition of the at least one high frequency drive unit relative thereto being such as to substantially eliminate any coherent reflection of sound from the at least one high frequency drive unit.
2. An acoustic drive array as claimed in claim 1, wherein the reflective surface is irregular and continuously varying, in terms of the distance from the periphery of the reflective surface to the at least one high frequency drive unit and the angle between the reflective surface and a plane in which the drive units of the array are mounted.
3. An acoustic drive array as claimed in claim 1, wherein the shortest distance from the centre of the at least one high frequency drive unit to any point on the periphery of the reflective surface is 30 mm or greater, and the largest distance from the centre of the at least one high frequency drive unit to any point on the periphery of the reflective surface is 155 mm or less.
4. An acoustic drive array as claimed in claim 1, wherein the reflective surface is generally concave.
5. An acoustic drive array as claimed in claim 4, wherein the outer periphery of the reflective surface has a convex, curved cross section to provide a smooth convex transition between the main reflective surface and its outermost edge.
6. An acoustic drive array as claimed in claim 1, wherein the reflective surface has a generally elliptical periphery and a quasi-ellipsoidal configuration, without focal points.
7. An acoustic drive array as claimed in claim 1, wherein the reflective surface incorporates a low frequency acoustic drive unit.
8. An acoustic drive array as claimed in claim 1, wherein the reflective surface

comprises a low frequency acoustic drive unit.

9. An acoustic drive array as claimed in claim 1, wherein the array includes first and second high frequency drive units.

10. An acoustic drive array as claimed in claim 1, wherein the mounting means includes a first portion supporting the midrange drive unit and an arm portion extending from said first portion and supporting the at least one high frequency drive unit, whereby the at least one high frequency drive unit is cantilevered in front of the reflective surface.

11. An acoustic drive array as claimed in claim 1, wherein the mounting means comprises an air-tight, sealed enclosure.

12. An acoustic drive array as claimed in claim 1, wherein the mounting means is configured to minimise the baffle area surrounding the drive units.

13. An acoustic drive array as claimed in claim 12, wherein the baffle area is configured to curve away and rearwards from the drive units.

14. An acoustic drive array as claimed in claim 1, wherein the means defining the reflective surface comprises a reflector member.

15. An acoustic drive array as claimed in claim 1, wherein the reflector member is secured to the mounting means to provide an integrated, self-contained drive array.

16. A loudspeaker comprising a cabinet having an acoustic drive array in accordance with claim 1 mounted therein.

17. A loudspeaker as claimed in claim 16, including at least one low frequency drive unit in addition to the drive units of the array.